



### Abstract of The Invention

a) The use of protection schemes and solid phase synthesis reactions to generate molecules of core structure M, which have a plurality of moieties, each of which can be individually deprotected or subsequently derivatized are provided. In one process, M is a multifunctional low molecular weight compound, such as a saccharide, aminosugar, deoxysugar, nucleoside, nucleotide, coenzyme, amino acid, lipid, steroid, vitamin, hormone, alkaloid, or small molecule drug. In another process, M is an oligomeric compound, such as an oligosaccharide, oligonucleotide, peptide or protein.